

**What is claimed is:**

1. A method of managing a radio transmission system affected by a source of degrade, the radio system comprising:

at least one transmitter receiving at its input a signal to be transmitted;

at least one transmission channel; and

at least one receiver for receiving signals transmitted by said at least one transmitter,

the method comprising the steps of measuring the quality of service offered by the radio system and obtaining a value indicative of such a quality, wherein it further comprises the steps of:

evaluating the type of degrade source;

associating a certain threshold value with each type of degrade source; and

comparing the value indicative of the quality of signal with the threshold value corresponding to the source of degrade that is present in the transmission channel.

2. A method according to claim 1, wherein the step of evaluating the type of source of degrade comprises the step of evaluating the samples of error autocorrelation.

3. A method according to claim 1 or 2, wherein the step of evaluating the type of source of degrade comprises the step of comparing the first error autocorrelation sample with a threshold value, if the first error autocorrelation sample is greater than the threshold value, it is deducted that the channel is affected by selective fading, otherwise by flat fading.

4. A method according to claim 1, wherein the steps of measuring the quality of service offered by the radio system and of obtaining a value indicative of such a quality comprise the step of performing a computation of the mean square error.

5. A method according to claim 1, wherein the steps of measuring the quality of service offered by the radio system and of obtaining a value indicative of such a quantity comprise the step of calculating a parameter inherent to the trellis of the codes in Trellis-coded modulations.

6. A method according to claim 1, wherein the steps of measuring the quality of service offered by the radio system and of obtaining a value indicative of such a quality comprise the step of carrying out an estimation of the number of errored symbols per second.

7. A method according to claim 1 wherein the system comprises at least one main channel to be protected and one spare channel, wherein it further comprises the additional step of utilizing the spare transmission channel in the instance where the value indicative of the quality of the signal in the main channel is greater than the corresponding threshold value.

8. A method according to claim 1, wherein it comprises the additional step of emitting alarms in the instance where the value indicative of the quality of the signal is greater than the corresponding threshold value.